



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/431,699	11/01/1999	CARL G. DEMARCKEN	09765/016001	9097

26161 7590 04/07/2004

FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

KAPADIA, MILAN S

ART UNIT	PAPER NUMBER
----------	--------------

2144

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/431,699

Applicant(s)

DEMARCKEN, CARL G.

Examiner

Milan S Kapadia

Art Unit

2144

MLW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 13-38 and 43-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 13-38, and 43-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2144

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the amendment filed 03 December 2003. Claims 1-9, 13-38 and 46-53 are pending. Claims 1, 13, 21, 26, 28, 30, 32-33, 35, and 43-44 have been amended. Claims 46-53 are newly added.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. The rejection of the claim 35 under 35 U.S.C. 112 as being indefinite is hereby withdrawn due to the amendment filed 12/03/03.
4. Claim 46 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2144

(A) Claim 46 recites the limitation "establishing a plurality of travel requirement templates, for each travel requirement template... " in line 6. This limitation is circular. For the purpose of prior art rejection, the examiner assumes claim 36 to recite "establishing a plurality of travel requirement templates, for each travel requirement."

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2144

6. Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 21, 25-29, 32, 33 38, 43-45 are rejected under 35 U.S.C. 102(e) as being anticipated by DeMarcken (6,295,521).

(A) As per claim 1, DeMarcken discloses a method for rules validation for a travel planning system comprising:

reducing a larger set of travel options to a smaller set of diverse travel options in accordance with diverse travel requirements that represent conditions for a travel option to be considered for inclusion in the set of diverse travel options that includes at least first and second travel options that satisfy first and second travel requirements, (DeMarcken; col. 49, lines 30-44, fig. 18, fig. 24, col. 50, lines 22-39, and col. 60, lines 47-55); the examiner interprets the “pricing graph” as “a larger set of travel options” and the “extracted pricing solutions” as a “smaller set of diverse travel options.”) with the first and second travel requirements representing different values in a category of travel requirements, and the flight options including a flight and fare combination (DeMarcken; col. 7, lines 17-28, col. 50, lines 41-49 and col. 60, lines 43-53).

(B) Claims 2-9 have not been amended and are rejected for the same reasons given in the previous Office Action (paper number 16), and incorporated herein.

(C) Claim 21 is the corresponding system claim to method claim 1 and therefore is rejected for the same reasons given above in the rejection of claim 1 and incorporated herein.

(D) As per claim 25, DeMarcken discloses evaluating for the travel requirements a

Art Unit: 2144

set of travel preference functions used to order the larger set of travel options (DeMarcken; col. 49, line 30-col. 50, line 39; the examiner interprets the “user query” as a form of “travel preference function.”)

(E) As per claim 26, DeMarcken teaches a method executed in a computer system to output a set of travel options (DeMarcken; col. 4, lines 14-16), the method comprising:

reducing a larger set of travel options to a smaller set of diverse travel options in accordance with diverse travel requirements that represent conditions for a travel option to be considered for inclusion in the smaller set of diverse travel options that includes at least first and second travel options that satisfy first and second travel requirements (DeMarcken; col. 49, lines 30-44, fig. 18, fig. 24, col. 50, lines 22-39, and col. 60, lines 47-55); the examiner interprets the “pricing graph” as “a larger set of travel options” and the “extracted pricing solutions” as a “smaller set of diverse travel options.”), with the first and second travel requirements representing different values in a category of travel requirements (DeMarcken; col. 50, lines 41-49 and col. 60, lines 43-53), and for each of the diverse travel requirements, at least one travel option in the set of diverse travel options representing a best travel option from the larger set of travel options for that specific requirement (DeMarcken; col. 49, lines 45-54 and col. 50, lines 22-39).

(F) As per claim 27, DeMarcken teaches wherein each of the travel options comprise an itinerary and price (DeMarcken; col. 5, lines 1-6).

Art Unit: 2144

(G) As per claim 28, DeMarcken discloses:

receiving a candidate set of travel options (DeMarcken; col. 49, lines 18-24);

for a plurality of travel requirements, with first and second travel requirements representing different values in a category of travel requirements, selecting one or more travel options for a specified travel requirement that satisfies the specified travel requirement (DeMarcken; col. 6, lines 1-6, col. 49, lines 30-67, and col. 50, lines 41-49); and

combining the selected one or more travel options for each travel preference function to provide a set of diverse travel options that includes at least first and second travel options that satisfy the first and second travel requirements (DeMarcken; col. 49, lines 30-67, col. 50, lines 22-49, and fig. 24).

(H) As per claim 29, DeMarcken teaches rendering the diverse set of travel options on an output device (DeMarcken; col. 49, lines 30-67).

(I) As per claim 32, DeMarcken teaches wherein the category for travel requirements comprise, travel on a particular carrier, number of stops, outbound travel departing in a predefined time period, return travel departing in a predefined time period, non-stop travel on a particular airline, or travel with an outbound departure on a first predefined date and a return arrival on a second predefined date (DeMarcken; fig. 24, col. 50, lines 34-39 and figures 26 and 27).

(J) As per claim 33, DeMarcken teaches wherein values for the predefined time

Art Unit: 2144

period comprise morning, afternoon, evening or a predefined date (DeMarcken; col. 50, lines 23-29; it is respectfully submitted, that a given itinerary involves predefined time periods that comprise morning, afternoon, evening or a predefined date (DeMarcken; col. 4, lines 43-51).

(K) Claim 43 differs from method claim 28 by reciting a “an article of manufacture having computer-readable program portions embodies therein...” in the preamble. As per this limitation, DeMarcken’s system is implemented on a computer (DeMarcken; col. 4, lines 14-16). As such, DeMarcken implicitly includes computer elements such as a programmed computer readable medium. The remainder of claim 43 repeats the limitations of claim 28, and is therefore rejected for the same reasons given above for claim 28.

(L) As per claim 44, DeMarcken teaches an article of manufacture having computer-readable portions embodied therein for generating a diverse set of travel options (DeMarcken; col. 5, lines 21-29), the article comprising instructions for causing a processor to:

generate a first ordered set of travel options using a first preference function

(DeMarcken; col. 50, lines 22-35);

select travel options from the first set, the selected travel options corresponding to a plurality of diverse travel requirements (DeMarcken; col. 50, lines 22-25);

generate a second ordered set of travel options using a second preference function, the second preference function being different from the first preference function (DeMarcken; col. 50, lines 25-33;

Art Unit: 2144

select travel options from the second set, the selected travel options corresponding to a plurality of diverse travel requirements (DeMarcken; col. 50, lines 25-33);

combine the selected travel options to generate the diverse set of travel options (DeMarcken; col. 49, lines 30-67, col.60, lines 47-55, and fig. 24)

(M) As per claim 45, DeMarcken teaches:

wherein the computer-readable portion for selecting a predefined number of best travel options from the first set further comprises selecting, for each travel requirement, selecting one or more travel options from the first set that satisfy that respective travel requirement (DeMarcken; col. 50, lines 22-25), and

wherein the computer-readable program portion for selecting a predefined number of best travel options from the second set further comprises for each travel requirement, selecting one or more travel options from the second set that satisfy that respective travel requirement (DeMarcken; col. 50, lines 25-33).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject

Art Unit: 2144

matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeMarcken et al (6,377,932) as applied to claims 21 and 28 above and further in view of Webber et al. (5, 331, 546).

(A) As per claim 13, DeMarcken teaches sorting the list of travel options Ts by an ordering function F to produce a best-first ordered list Ts2 (DeMarcken; col. 50, lines 41-49).

However, DeMarcken fails to expressly teach the remaining limitations but does teach applying the requirements in a specific order (DeMarcken; col. 50, lines 22-23). However, these features are old and well known in the art, as evidenced by Webber's teachings with regards to:

generating a prioritized ordered list of requirements Rs (Webber; fig. 4A; the examiner interprets requirements like items 60, 62, and 66 in fig. 4A as a "prioritized list of requirements.");

selecting a travel requirement R1 from the list of requirements Rs (Webber; col. 8, lines 32-41; the Examiner interprets step "62" as the "R1" requirement);

identifying a travel option T1 in the ordered list Ts2 that satisfies the travel requirement R1 that represents a value in a category of travel requirements (Webber; col. 8, lines 32-41);

Art Unit: 2144

adding the travel option T1 to the diverse list of travel options Rts (Webber; col. 8, lines 32-41; the Examiner interprets the “temporary list” as a form of “diverse list of travel options”);

selecting a second travel requirement R2 from the list of requirements Rs (Webber; col. 8, lines 42-59; the Examiner interprets step “66” as travel requirement “R2”);

identifying a travel option T2 in the ordered list Ts2 that satisfies travel requirement R2 that represents a different value in the category of the first travel requirement R1 (Webber; col. 8, lines 42-59); and

adding the travel option T2 to the diverse list of travel options Rts (Webber; col. 8, lines 42-59).

It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken with Webber’s teaching with regards to these limitations, with the motivation of taking into account details of a preset corporate travel policy, as well as individual travel preferences, such as the trade-offs between ticket prices and travel time (Webber; col. 2, lines 36-41).

(B) As per claim 14, DeMarcken fails to expressly disclose initializing the list of result travel options Rts to be empty; and if the remaining list of requirements Rs is empty, returning an ordered list of diverse travel options Rts. However, this feature is old and well known in the art, as evidenced by Webber’s teachings with regards to initializing the list of result travel options RTs to be empty; and if the remaining list of requirements Rs is empty, returning an ordered list of diverse travel options Rts (Webber; col. 8, lines 35-50, fig. 6A, and fig. 6B; it is respectfully submitted, that if the resulting travel options list is empty after testing a

Art Unit: 2144

requirement, then the list of result travel options has been initialized to be empty; the examiner interprets "save as one of the six best preference itineraries," item 234 of fig. 6A, as occurring after determining that the "remaining list of requirements is empty" and interprets "sort the selected itineraries by departure time and display them and their best fares to the travel arranger" as "returning an ordered list of diverse travel options."). It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken with Webber's teachings with regards to initializing the list of result travel options RTs to be empty; and if the remaining list of requirements Rs is empty, returning an ordered list of diverse travel options Rts, with the motivation of rapidly sifting through what may be thousands of currently available flights, fares and rules for a given trip and to find the lowest fare for which the particular traveler and trip qualify and for which seats are available (Webber; col. 4, lines 25-34).

(C) As per claim 15, the collective system of DeMarcken and Webber teach initializing the list of result travel options Rts to be empty as shown above in the rejection of claim 14, and therefore incorporated herein. The combined system of DeMarcken and Webber, collectively also teach if the remaining list of requirements Rs is not empty, selecting a first travel requirement R from the ordered list of requirements (Rs) (Webber; fig. 6A; the examiner interprets selecting requirements, like items 226 and 228 of fig. 6A, as "selecting a first travel requirement from the ordered list of requirements if the remaining list of requirement is not empty.")

Art Unit: 2144

However, the combined system of DeMarcken and Webber, collectively fail to teach removing a requirement R from the requirement list (Rs). It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the collective system taught by DeMarcken and Webber to remove the requirement from the list, with the motivation ensuring a particular requirement is not applied multiple times.

(D) As per claims 16 and 17, DeMarcken fails to expressly disclose finding a first option T in a best-first ordered list (Ts2) that satisfies travel requirement R and determining whether any option in the Ts2 satisfies the travel requirement. However, this feature is old and well known in the art, as evidenced by Webber's teachings with regards to finding a first option T in a best-first ordered list (Ts2) that satisfies travel requirement R and determining whether any option in the Ts2 satisfies the travel requirement (Webber; fig. 2; the examiner interprets "select itineraries with available seats and lowest valid fares" as "finding a first option that satisfies travel requirements" and interprets "select only confirming itineraries" as "determining whether an options satisfies travel requirement.") It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken with Webber's teachings with regards to finding a first option T in a best-first ordered list (Ts2) that satisfies travel requirement R and determining whether any option in the Ts2 satisfies the travel requirement, with the motivation of rapidly sifting through what may be thousands of currently available flights, fares and rules for a given

Art Unit: 2144

trip and to find the lowest fare for which the particular traveler and trip qualify and for which seats are available (Webber; col. 4, lines 25-34).

(E) As per claim 18, DeMarcken fails to expressly disclose if no option in Ts2 satisfies R, the method further comprises: checking if the remaining list of requirements Rs is empty. However, this feature is old and well known in the art, as evidenced by Webber's teachings with regards to checking if the remaining list of requirements Rs is empty if no option in Ts2 satisfies R (Webber; col. 8, lines 25-40). It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken with Webber's teachings with regards to checking if the remaining list of requirements Rs is empty if no option in Ts2 satisfies R, with the motivation of rapidly sifting through what may be thousands of currently available flights, fares and rules for a given trip and to find the lowest fare for which the particular traveler and trip qualify and for which seats are available (Webber; col. 4, lines 25-34).

(F) As per claim 19, the collective system of DeMarcken and Webber teach determining if the size of the travel option list Rts is equal to or greater than N the process in order to return the ordered list of diverse travel options (Webber; col. 15, lines 7-17).

However, the combined system of DeMarcken and Webber collectively fail to teach after determining if a travel option T is not already in the result list Rts, adding the travel option T to end of the result travel option list Rts. It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the

Art Unit: 2144

collective system taught by DeMarcken and Webber to determine if a travel option T is not already in the result list Rts and adding the travel option T to end of the result travel option list Rts, with the motivation ensuring a particular travel option does not show up multiple times in the travel option result list.

(G) As per claim 20, the combined system of DeMarcken and Webber, collectively fail to teach determining for each travel requirement R2 in Rs, whether the requirement R2 includes a requirement R, and T satisfies R2, and if T satisfies R2; removing R2 from Rs. It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the collective system taught by DeMarcken and Webber to determine for each travel requirement R2 in Rs, whether the requirement R2 includes a requirement R, and T satisfies R2, and if T satisfies R2; removing R2 from Rs, with the motivation improving the speed of the system by by-passing the application of a requirement that is a subset of an already applied requirement.

(H) Claims 22-24 are the corresponding system claims to method claims 13-15 and therefore are rejected for the same reasons given above in the rejections of claims 13-15 and incorporated herein.

(I) As per claim 31, DeMarcken fails to expressly teach wherein at least one of the travel requirements within the plurality is not a user entered travel requirement. However, this feature is old and well known in the art, as evidenced by Webber's teachings with regards to

Art Unit: 2144

wherein at least one of the travel requirements within the plurality is not a user entered travel requirement (Webber; fig. 4A; the examiner interprets items 60, 62, and 66 in fig. 4A as forms of "travel requirements." It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken with Webber's teachings with regards to this limitation, with the motivation of taking into account details of a preset corporate travel policy, as well as individual travel preferences, such as the trade-offs between ticket prices and travel time (Webber; col. 2, lines 36-41).

9. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeMarcken et al (6,377,932) as applied to claim 28 above.

(A) As per claim 30, DeMarcken fails to expressly teach eliminating from the plurality of travel requirements a third travel requirement when the one or more travel options selected for a fourth travel requirement satisfy the first travel requirement. However, it is respectfully submitted that it is well-known in the art that applying a set travel requirement may result in the same subset of travel options (i.e., the 10 cheapest flights may also be the 10 best flights for convenience). As such, it is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken to eliminate from the plurality of travel requirements a third travel requirement when the one or more travel options selected for a fourth travel requirement satisfy the first travel requirement, with the motivation of making the requirements-applying process faster and

Art Unit: 2144

more efficient by eliminating redundant requirements that would produce a similar subset of the travel options.

10. Claims 34-38 and 46-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeMarcken et al (6,377,932) as applied to claim 28 above and further in view of Karch et al. (6,442,537).

(A) As per claim 34 DeMarcken teaches the travel requirements are rules

(DeMarcken; col. 3, lines 8-9) but fails to expressly teach defining a template of rules.

However, this feature is old and well known in the art, as evidenced by Karch's teachings with regards to defining a template of rules (Karch; col. 1, line 66-col. 2, line 6). It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken with Karch's teachings with regards to this limitation, with the motivation of utilizing an efficient rules system that does not result in significant degradation of performance through the use of extensive amounts of processing power (Karch; col. 1, lines 38-42).

(B) As per claim 35, DeMarcken teaches the travel requirements are rules and

wherein the plurality of travel requirements are based at least in part on the candidate set of travel options (DeMarcken; col. 3, lines 8-9 and col. 50, lines 41-66) but fails to expressly teach wherein the rules are based at least in part on the template. However, this feature is old and well known in the art, as evidenced by Karch's teachings with regards to wherein the rules are based

Art Unit: 2144

at least in part on the template (Karch; col. 1, line 66-col. 2, line 6). It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken with Karch's teachings with regards to this limitation, with the motivation of utilizing an efficient rules system that does not result in significant degradation of performance through the use of extensive amounts of processing power (Karch; col. 1, lines 38-42).

(C) As per claim 36, the combined system of DeMarcken and Karch collectively teach that the parameter values for the template can be adjusted (Karch; col. 2, lines 12-25) but collectively fail to expressly teach that the adjustments to the parameter values of the template are based on analyzing the candidate set of travel options. However, since the combined system of DeMarcken and Karch collectively teach that the function of the rule customization process is to receive inputs and customize the template rules based on the inputs (Karch; col. 2, lines 26-35) and collectively teach that the travel options are inputs into the rules-applying process (DeMarcken; col. 50, lines 22-39), it is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken and Karch teachings to analyze the candidate set of travel options to determine parameter values for the template, with the motivation of customizing the rules for the specific domain model (Karch; col. 2, lines 19-35).

(D) As per claim 37, DeMarcken teaches wherein the travel requirements comprise,

Art Unit: 2144

travel on a particular carrier, non-stop travel, outbound travel departing in a predefined time period, return travel departing in a predefined time period, non-stop travel on a particular airline, or travel with an outbound departure on a first predefined date and a return arrival on a second predefined date (DeMarcken; col. 50, lines 34-39 and figures 6 and 27) but fails to expressly teach wherein the rules are based at least in part on the template. However, this feature is old and well known in the art, as evidenced by Karch's teachings with regards to wherein the rules are based at least in part on the template (Karch; col. 1, line 66-col. 2, line 6). It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken with Karch's teachings with regards to this limitation, with the motivation of utilizing an efficient rules system that does not result in significant degradation of performance through the use of extensive amounts of processing power (Karch; col. 1, lines 38-42).

(E) As per claim 38, DeMarcken teaches wherein the predefined time period comprises morning, afternoon, evening or a predefined date (DeMarcken; col. 50, lines 23-29; it is respectfully submitted, that a given itinerary involves predefined time periods that comprise morning, afternoon, evening or a predefined date (DeMarcken; col. 4, lines 43-51).

(F) As per claim 46, DeMarcken teaches a method for generating a diverse set of travel options, the method comprising:

determining a candidate set of travel options, the candidate set of travel options being based on user input (DeMarcken; col. 49, lines 30-37);

Art Unit: 2144

defining a set of diversity requirements, with defining:

establishing a plurality of travel requirement rules, for each travel requirement

(DeMarcken; col. 49, lines 41-59);

defining a plurality of travel requirements, each of the travel requirements

corresponding to a different value of the respective travel rule to produce the set of diversity

requirements, and for each travel requirement in the set of diversity requirements (DeMarcken;

col. 50, lines 41-49 and col. 60, lines 47-55)),

selecting from the candidate set of travel options a travel option that satisfies that

travel requirements (DeMarcken; col. 50, lines 41-49;

combining the selected travel options for the travel requirements to generate the

diverse set of travel options (DeMarcken; col. 50, lines 21-33 and col. 60, lines 36-55; and

displaying the diverse set of travel options to a user (DeMarcken; col. 60, lines

36-55;

DeMarcken fails to expressly teach wherein the rules are based at least in part on the template. However, this feature is old and well known in the art, as evidenced by Karch's teachings with regards to wherein the rules are based at least in part on the template (Karch; col. 1, line 66-col. 2, line 6). It is respectfully submitted, that it would have been obvious, to one having ordinary skill in the art at the time the invention was made, to expand the system taught by DeMarcken with Karch's teachings with regards to this limitation, with the motivation of utilizing an efficient rules system that does not result in significant degradation of performance through the use of extensive amounts of processing power (Karch; col. 1, lines 38-42).

Art Unit: 2144

(G) Claims 47 and 48 repeat the features of claims 35 and 36 and are therefore rejected for the same reasons given above in the rejections of claims 36 and 37 and incorporated herein.

(H) As per claim 49, DeMarcken teaches wherein values for the travel requirement template of particular carriers with corresponding travel requirements including a first particular airline and a second, different particular airline (DeMarcken; fig. 24 and col. 60, lines 47-55).

(I) Claims 50-53 differs from method claims 46-49 by reciting a “an article of manufacture having computer-readable program portions embodies therein...” in the preamble. As per this limitation, DeMarcken’s system is implemented on a computer (DeMarcken; col. 4, lines 14-16). As such, DeMarcken implicitly includes computer elements such as a programmed computer readable medium. The remainder of claims 50-53 repeats the limitations of claims 46-49, and is therefore rejected for the same reasons given above for claims 46-49.

Response to Arguments

11. Applicant’s arguments with respect to amended claims 1, 13, 21, 26, 28, 30, 32-33, 35, 43-44, and 46-53 have been considered but are moot in view of the new ground(s) of rejection.

(A) At pages 13-16 of the 12/3/03 communication, Applicant argues each of the applied references individually.

Art Unit: 2144

In response, the Examiner respectfully submits that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In particular, the teachings that Applicant argues are novel and/or missing from the DeMarcken reference are in fact clearly disclosed by the teachings of DeMarcken, Webber, and/or Karch, as discussed in the preceding rejections, and incorporated herein.

Further, the features newly added and entered in the amendment filed 12/3/03, they have been shown to be fully disclosed by DeMarcken, Webber, and/or Karch, as discussed above in detail within the preceding sections of the present Office Action.

In addition, it is respectfully submitted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2144

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Milan S Kapadia whose telephone number is 703-305-3887. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 703-308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Application/Control Number: 09/431,699

Page 23

Art Unit: 2144

mk

April 5, 2004

Alexander Krawowski
Primary Examiner
Au 3626